

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Applicant:	Leila Parker-Malchak	§	Group Art Unit:	3627
		§		
Serial No.:	10/730,665	§	Confirm. No.:	4833
		§		
Filed:	December 8, 2003	§	Examiner:	Fawaad Haider
		§		
For:	SELF-CHECKOUT SYSTEM	§	NCR Dkt. No.:	11362

BRIEF IN SUPPORT OF APPEAL

Sir:

This is a brief in support of Applicant's notice of appeal filed on January 23, 2009, in response to the final rejection dated July 25, 2008, in this matter. In addition, Applicant filed a pre-appeal brief with the notice of appeal. On February 11, 2009, the Office issued a Notice of Panel Decision stating the case should proceed to the Board of Patent Appeals and Interferences. Therefore, Applicant is filing this brief in support of appeal. Please provide any extensions of time that may be necessary and charge any fees that may be due to Account No. 14-0225, but not to include any payment of issue fees.

(1) REAL PARTY IN INTEREST

The real party in interest in this matter is NCR Corporation, Dayton, Ohio, by virtue of an assignment recorded at reel 012711, frame 0374-0075, on December 8, 2003.

(2) RELATED APPEALS AND INTERFERENCES

Applicant is not aware of any appeals or interferences related to this patent application (serial no. 10/730,665).

(3) STATUS OF CLAIMS

Claims 6-19 are currently pending in the application and have been rejected two or more times.

Claims 1-5 have been cancelled.

Claims 6-19 are being appealed and are shown in an Appendix attached to this Appeal Brief.

(4) STATUS OF AMENDMENTS

Applicant has filed no amendments after receipt of the July 17, 2008 final Office Action.

(5) SUMMARY OF CLAIMED SUBJECT MATTER

Note: Items in figures are referenced as Fig. #:item (e.g. Fig. 1:12 for Figure 1, item 12).

(A) EXPLANATION:

Claimed are retail terminals and a system that determine first information identifying an item presented for purchase and determine any discrepancies between the weight of the presented item and the predetermined weight of the identified item. If a weight discrepancy is detected, an RFID antenna focused on a bagging area is actuated to verify the identification of the item placed in the bagging area. An error indicator is actuated only if there is a discrepancy between the first identification information for the item and the identification information received from the RFID antenna for the item in bagging area. (Specification, page 20, Operation section.)

(B) CLAIMS WITH SPECIFICATION SUPPORT

Claim	Specification Support
Claim 6. A retail terminal comprising:	Page 7, first paragraph, Fig. 1:10.
a processor;	Page 7, third paragraph, Fig. 1:12.
a memory in communication with said processor and containing program instructions operative to control said processor, said memory further storing a weight learning database (WLDB) containing a list of predetermined weights for items for sale;	Page 7, third paragraph, Fig. 1:14 Page 8, second and third paragraphs.
a scale in communication with said processor and operative to obtain a weight measurement of an item for sale placed on said scale;	Page 7, third paragraph, Fig. 1:16.
a means for determining the identification of the item, at the weight scale;	Means plus function clause. Page 12, second full paragraph describes a scanner that identifies an item that is located at the weight scale, Fig. 2:18.
a scan error indicator in communication with the processor; and	Page 9, last paragraph – page 10, first paragraph, Fig. 1:22.
a first radio frequency identification (RFID) tag antenna in communication with the processor, and focused on a bagging area of the terminal;	Page 19, last paragraph – page 20, first paragraph. Fig. 1:25 and Fig. 2:25.
the program instructions operative to control said processor to compare the stored and measured weights for the identified item and to actuate the first RFID antenna to verify the identification of the item if there is a perceived error in the weight of the item as measured by the scale,	Page 8, first full paragraph, page 20, last paragraph – page 21, first paragraph. Fig. 1:14, 1:12 and Fig. 1:25.
the program instructions further operative to control said processor to compare the item identification	Page 8, first full paragraph, page 20, last paragraph – page 21, first

determined by the means for determining the identification of the item and by the first RFID antenna,	paragraph. Fig. 1:14, 1:12 and 1:25.
the scan error indicator only being actuated if the comparison of the identification of the item raises a discrepancy.	Page 21, first full paragraph. Fig. 1:22.
11. A checkout system comprising:	Page 7, second paragraph, Fig. 2:10.
a processor;	Page 7, third paragraph, Fig. 1:12.
a scale in communication with said processor and operative to obtain a weight measurement of an item placed on said scale;	Page 7, third paragraph, Fig. 1:16.
a means for identifying the item, at the scale, and in communication with said processor; and	Means plus function clause. Page 12, second full paragraph describes a scanner that identifies an item that is located at the weight scale, Fig. 2:18.
memory in communication with said processor and containing program instructions operative to control said processor, said memory further storing a weight learning database (WLDB) containing a list of predetermined weights for items for sale;	Page 7, third paragraph, Fig. 1:14 Page 8, second and third paragraphs.
the program instructions operative to control said processor to compare the stored and measured weights for the identified item and to actuate a first radio frequency identification (RFID) antenna if there is a perceived error in the weight of the item as measured by the scale,	Page 8, first full paragraph, page 20, last paragraph – page 21, first paragraph. Fig. 1:14, 1:12 and 1:25.
the program instructions further operative to control said processor to compare the identification of the	Page 8, first full paragraph, page 20, last paragraph – page 21, first

item identified by the means for identification and the RFID antenna,	paragraph. Fig. 1:14, 1:12 and 1:25.
the scan error indicator only being actuated if the comparison of the identification of the item raises a discrepancy.	Page 21, first full paragraph. Fig. 1:22.
15. A retail terminal comprising:	Page 7, first paragraph, Fig. 1:10.
a scale for generating scale data;	Page 7, third paragraph, Fig. 1:16.
a processor for executing program instructions and operably connected the scale and to a weight learning database (WLDB) containing a list of predetermined items and associated weights for the items; and	Page 7, third paragraph, Fig. 1:12 Page 8, second and third full paragraphs.
a memory in communication with the processor and containing program instructions for controlling the processor to:	Page 8, first full paragraph, Fig. 1:14.
obtain scale data for an item placed on the scale,	Page 8, third full paragraph, Fig. 1:18.
identify the item placed on the scale as one of the items in the list of items;	Page 9, first full paragraph.
obtain the associated weight for the one of the items in the list of items,	Page 9, last full paragraph.
actuate a first radio frequency identification (RFID) antenna to obtain RFID data from the item that was placed on the scale in response to identification of a discrepancy between the obtained scale data and the obtained associated weight,	Page 19, last paragraph – page 20, first paragraph. Fig. 1:25 and Fig. 2:25.
compare the identity of the item placed on the scale with an identification based upon the RFID data, and	Page 20, last paragraph – page 21, first paragraph. Fig. 1:25.
generate an indication if the RFID data identification does not match the identity of the item placed on the	Page 21, first full paragraph. Fig. 1:22.

scale.

(6) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

(A) Grounds used to Reject Independent Claims 6, 11 and 15

Claims 6-19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ruppert et al. (U.S. Patent No. 5,640,002; hereinafter “Ruppert”) in view of Garwood (U.S. Publication No. 2003/0185948).

(7) ARGUMENT

All rejected claims should be allowed over the cited prior art references for the reasons set forth below.

(A) 103(a) Rejection of Claims 6, 11 and 16

Discussion re: Patentability of Independent Claims 6, 11 and 16

The obviousness rejection hinges on the application of Ruppert in combination with Garwood. As discussed in greater detail below, Ruppert and Garwood do not support the Office’s reading of them and the Board should reverse the rejection based thereupon. Further, the Applicant does not acquiesce in the analysis of Ruppert and Garwood made by the Office and respectfully traverses the Office’s analysis underlying the rejections.

The Office improperly alleges that Ruppert teaches all of the elements of Applicant’s claimed invention except for one. The one element acknowledged by the Office to be missing from Ruppert is a weight learning database stored in a memory, which the Office alleges is disclosed by Garwood. Applicant asserts that Ruppert fails to properly disclose additional required elements and that the Office has erred by alleging that these additional elements are found within Ruppert.

Ruppert discloses a portable personal product scanner used by a shopper to identify items placed in a basket as the shopper travels around a store. (See Ruppert, col. 5, 46-65.) To identify items placed in the basket, Ruppert’s scanner uses a bar code reader. Other embodiments teach the use of an additional RFID tag reader. On page 2 of

the Office Action mailed on January 25, 2008 and again in the Office Action mailed July 17, 2008, the Office asserts that the processor and memory depicted in Ruppert's figure 3 are equivalent to Applicant's required processor and memory. Applicant contends this repeated assertion is in error. Applicant requires, in part, a retail terminal comprising a processor in communication with: a memory, a scale and a radio frequency identification tag antenna that is focused on a bagging area of the terminal. Ruppert's figure 3 discloses an embodiment of the portable personal product scanner that is absent a scale and an RFID reader. Therefore, the processor of figure 3 cannot be properly equated to Applicant's required processor because the processor of figure 3 is not in communication with a scale or an RFID reader as required by Applicant. Thus, the Office has failed to establish that Ruppert shows or suggest the required processor.

The Office asserts that Applicant's scale in communication with the processor is disclosed by Ruppert in Figure 32 and col. 11, lines 45-58. Applicant disagrees. Figure 32 shows a scale at a check-out station. There is no discussion of a processor or the other elements required by Applicant to be present. The Office previously asserted that the processor required by Applicant is located in a portable personal product scanner and then asserts that the scale, which must be in communication with the processor, is located in a check-out station. The scale in the check-out station is clearly not in communication with the processor in the portable personal product scanner, so it cannot be equated to the scale required by Applicant. The Office has erred in this assertion. Figure 3, clearly fails to disclose the required element.

In addition to the above Figure with a scale, the Office cites a passage from Ruppert for support. The passage teaches that a produce clerk has a stand-alone scale that has the ability to generate a bar code encoded with the weight information from the scale. In this embodiment, a shopper brings unpackaged produce to the clerk. The clerk bags the produce, weights the bag, prints a label with the correct weight and price and affixes the label to bag. The portable personal product scanner can then read the bar code. The passage fails to disclose a scale in communication with the required processor. The passage, like Figure 3, fails to disclose the required element. Thus, the Office has failed to establish that Ruppert shows or suggest the required scale.

Applicant requires “a first radio frequency identification (RFID) tag antenna in communication with the processor, and focused on a bagging area of the terminal.” The Office asserts that Ruppert discloses this requirement and first cites antenna 304 in Figures 16 and 25 for support. Applicant disagrees with this assertion. Applicant requires RFID tag antenna. Ruppert teaches “antenna 304 is coupled to an RF module (not shown) which is used to download data to a host computer coupled to a local area network with an RF link... .” (Col. 17, lines 20-23.) Ruppert antenna 304 is used for data communications on a local area network and not as an RFID tag antenna. This citation fails to support the Office’s assertion.

The Office further asserts for support antenna 442 in Figure 21. Ruppert discloses that antenna 442 is located on the portable personal product scanner and is driven by an RF transceiver module 312A. (See col. 23, lines 31-33.) Again this is an antenna used to on a local area network and not to communicate with RFID tags. This citation also fails to support the Office’s assertion. Therefore, the Office has failed to establish that Ruppert shows or suggests the elements required by Applicant.

Applicant requires “the scan error indicator only being actuated if the comparison of the identification of the item raises a discrepancy.” The Office asserts that Ruppert discloses these elements and cites Figures 32, 33 and column 45 lines 45-52 for support. Applicant disagrees. Figures 32 and 33 disclose a system where data from scanned items are transferred from a portable personal product scanner to a host store computer. The scanned items are placed on a scale of checkout station and the total weight of the items is sent to the host computer. If the expected weight of the items matches the actual weight of the items as reported by the scale and the consumer has paid, the host computer sends a command to deactivate any security tags. If the weights do not match, a security clerk is notified. This simply does not teach the elements required by Applicant. Ruppert clearly teaches that a notification occurs when the weights do not match. Applicant on the other hand, requires a scan error indicator only when there is a discrepancy in the item identification. Ruppert’s teaching and Applicant’s requirements are clearly not the same. Therefore, the Office has failed to establish that Ruppert shows or suggests the required elements.

Garwood teaches packages and methods for processing food products and fails to provide any of the elements shown to be missing from Ruppert.

The Office has failed to show that these references, whether taken separately or together, shows or make obvious all of the elements required by Applicant's claimed invention. Therefore, the Office has failed to establish a *prima facie* case of obviousness and the Board of Appeals is respectfully requested to reverse this rejection.

Discussion re: Patentability of Dependent Claims

The dependent claims are rejected for the same reasons and using the same prior art as the independent claims. Therefore, Applicant respectfully requests that the Board of Appeals reverse the rejections of the dependent claims for the same reasons given for the independent claims above.

CONCLUSION

Claims 6-19 are not obvious under 35 U.S.C. §103(a) over Ruppert in view of Garwood. Accordingly, the Board of Appeals is respectfully requested to reverse the rejections of claims 6-19 and allow all pending claims.

Respectfully submitted,

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(Filed Electronically)

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(8) CLAIMS APPENDIX

Claims 1-5. (Canceled)

Claim 6. A retail terminal comprising:

- a processor;
- a memory in communication with said processor and containing program instructions operative to control said processor, said memory further storing a weight learning database (WLDB) containing a list of predetermined weights for items for sale;
- a scale in communication with said processor and operative to obtain a weight measurement of an item for sale placed on said scale;
- a means for determining the identification of the item, at the weight scale;
- a scan error indicator in communication with the processor; and
- a first radio frequency identification (RFID) tag antenna in communication with the processor, and focused on a bagging area of the terminal;
- the program instructions operative to control said processor to compare the stored and measured weights for the identified item and to actuate the first RFID antenna to verify the identification of the item if there is a perceived error in the weight of the item as measured by the scale,
- the program instructions further operative to control said processor to compare the item identification determined by the means for determining the identification of the item and by the first RFID antenna,
- the scan error indicator only being actuated if the comparison of the identification of the item raises a discrepancy.

Claim 7. A retail terminal as claimed in claim 6, wherein the means for determining the identification of the item comprises a bar code scanner in communication with said processor.

Claim 8. The retail terminal of claim 6, wherein the means for determining the identification of the item comprises a second RFID antenna, focused on the scale area of the terminal and in communication with said processor.

Claim 9. The retail terminal of claim 6, wherein said indicator comprises one of an audio device and a video device.

Claim 10. The retail terminal of claim 6, wherein the first RFID tag antenna is attenuated so as not to detect tags located at the scale.

Claim 11. A checkout system comprising:

- a processor;
- a scale in communication with said processor and operative to obtain a weight measurement of an item placed on said scale;
- a means for identifying the item, at the scale, and in communication with said processor; and
- memory in communication with said processor and containing program instructions operative to control said processor, said memory further storing a weight learning database (WLDB) containing a list of predetermined weights for items for sale;
- the program instructions operative to control said processor to compare the stored and measured weights for the identified item and to actuate a first radio frequency identification (RFID) antenna if there is a perceived error in the weight of the item as measured by the scale,
- the program instructions further operative to control said processor to compare the identification of the item identified by the means for identification and the RFID antenna,
- the scan error indicator only being actuated if the comparison of the identification of the item raises a discrepancy.

Claim 12. The checkout system of claim 11, wherein said indicator comprises one of an audio device and a video device.

Claim 13. A retail terminal as claimed in claim 11, wherein the means for identifying an item to be purchased is a bar code scanner in communication with said processor.

Claim 14. The retail terminal of claim 11, wherein the means for identifying an item to be purchased is a second RFID antenna, focused on the scale area of the terminal and in communication with said processor.

Claim 15. A retail terminal comprising:

- a scale for generating scale data;
- a processor for executing program instructions and operably connected the scale and to a weight learning database (WLDB) containing a list of predetermined items and associated weights for the items; and
- a memory in communication with the processor and containing program instructions for controlling the processor to:
 - obtain scale data for an item placed on the scale,
 - identify the item placed on the scale as one of the items in the list of items;
 - obtain the associated weight for the one of the items in the list of items,
 - actuate a first radio frequency identification (RFID) antenna to obtain RFID data from the item that was placed on the scale in response to identification of a discrepancy between the obtained scale data and the obtained associated weight,
 - compare the identity of the item placed on the scale with an identification based upon the RFID data, and
 - generate an indication if the RFID data identification does not match the identity of the item placed on the scale.

Claim 16. The retail terminal of claim 15, further comprising:

- a scanner operably connected to the processor,
- wherein the program instructions for controlling the processor to identify the item placed on the scale further comprise program instructions for controlling the processor to identify the item placed on the scale using scanner data generated by the scanner.

Claim 17. The retail terminal of claim 15, further comprising:

a second RFID antenna operably connected to the processor,
wherein the program instructions for controlling the processor to identify the item placed on the scale further comprise program instructions for controlling the processor to identify the item placed on the scale using RFID data generated by the second RFID antenna.

Claim 18. The retail terminal of claim 15, further comprising:

a bag well area, wherein the first RFID antenna is focused on the bag well area.

Claim 19. The retail terminal of claim 15, further comprising:

a scan error indicator in communication with the processor for indicating when the RFID data identification does not match the identity of the item placed on the scale.

(9) EVIDENCE APPENDIX

None.

(10) RELATED PROCEEDINGS APPENDIX

None.